I. Muhammad

1638

PAGE:

RAW SEQUENCE LISTING

PATENT APPLICATION US/09/464,528A

DATE: 04/21/2000

TIME: 09:15:30.

Input Set: 1464528A.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

```
1
     <110> APPLICANT: Li, Zhongsen
 2
           Falco, S. Carl
     <120> TITLE OF INVENTION: S-ADENOSYL-L-METHIONINE SYNTHETASE PROMOTER AND
 3 .
           ITS USE IN EXPRESSION OF TRANSGENIC GENES IN PLANTS
 4
     <130> FILE REFERENCE: BB1205 US NA
 5
 6
     <140> CURRENT APPLICATION NUMBER: US/09/464,528A
 7
     <141> CURRENT FILING DATE: 1999-12-15
     <160> NUMBER OF SEQ ID NOS: 20
 8
     <170> SOFTWARE: Microsoft Office 97
 9
10
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     <212> TYPE: DNA
12
     <213> ORGANISM: Glycine max
13
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15
           ttaaagtatt aagatggcag agacattcct atttacctca gagtcagtga acgagggaca
                                                                             120
16
                                                                             180
17
           ccctqacaaq ctctqcqacc aaatctccqa tqctqtcctc gacgcttgcc ttgaacagga
           cccagacage aaggttgeet gegaaacatg caccaagace aacttggtca tggtettegg
                                                                             240
18
19
           agagatcace accaaggeca acgttgacta cgagaagate gtgcgtgaca cetgcaggaa
                                                                             300
           categgette gteteaaaeg atgtgggaet tgatgetgae aaetgeaagg teettgtaaa
                                                                             360
20
                                                                             420
           cattgagcag cagagccctg atattgccca gggtgtgcac ggccacctta ccaaaagacc
21
                                                                             480
22
           cqaqqaaatc qqtqctggaq accagggtca catgtttggc tatgccacgg acgaaacccc
           agaattgatg ccattgagtc atgttcttgc aactaaactc ggtgctcgtc tcaccgaggt
                                                                             540
23
           togcaagaac ggaacctgcc catggttgag gcctgatggg aaaacccaag tgactgttga
                                                                             600
24
           gtattacaat gacaacggtg ccatggttcc agttcgtgtc cacactgtgc ttatctccac
25
                                                                             720
           ccaacatgat gagactgtga ccaacgacga aattgcagct gacctcaagg agcatgtgat
26
                                                                             780
27
           caageeggtg ateceggaga agtacettga tgagaagace attttecaet tgaaceeete
           tggccqtttt gtcattggag gtcctcacgg tgatgctggt ctcaccggcc gcaagatcat
                                                                             840
28
29
           catcgatact tacggaggat ggggtgctca tggtggtggt gctttctccg ggaaggatcc
           caccaaggtt gataggagtg gtgcttacat tgtgagacag gctgctaaga gcattgtggc
30
           aagtggacta gccagaaggt gcattgtgca agtgtcttat gccattggtg tgcccgagcc 1020
31
32
           tttgtctgtc tttgttgaca cctatggcac cgggaagatc catgataagg agattctcaa 1080
33
          cattgtgaag gagaactttg atttcaggcc cggtatgatc tccatcaacc ttgatctcaa 1140
34
          gaggggtggg aataacaggt tottgaagac tgotgcatat ggacacttog gcagagagga 1200
          ccctgacttc acatgggaag tggtcaagcc cctcaagtgg gagaaggcct aaggccattc 1260
35
          attecactge aatgtgetgg gagtttttta gegttgeeet tataatgtet attatecata 1320
36
           actiticacy tecetigete tytytitte tetegtegte efectectat titytitete 1380
37
38
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          39
          aaaaaaaaa aaaaaaaa
40
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<210> SEQ ID NO 2 41

42 <211> LENGTH: 2336

43 <212> TYPE: DNA

44 <213> ORGANISM: Glycine max

RAW SEQUENCE LISTING

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                                                                              120
47
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48
           atttaaatta gaattttttt tatcaataaa tattaattta ttagttttat tagaaatatt .
           aattagaaaa ttttgaatcc ccgatttctc ctccttttct tcgctattca tcattttcta
49
50
           accaaaccaa tottatatgt tottoaaatt agaacttgaa attattaatt ataattaaac
51
           tgaaaacaat ttggtatcaa ttcatataca tgcttagtaa taaaatgcga taattaattg
           ataaatctgc aaaagatttt acaaatatct ttcagaaaaa attaataaca aattttgtcg
52
53
           ttttcatggt gttggtctga ggaggatttg gcactataga actctcctac ggaccattct
                                                                              480
54
                                                                              540
           ttgcacttca actaaacgat ggtcagaatt ggtggggatt ttatattcaa gcatatccct
55
           ttcaaaactt cctacttact tcgtgcgttc ggtaatcggt aacattagac tttcaaaatc
56
           atttttaacc cctaaacagt aaatttgaag gacaaaaata atatttttca aatttgatag
                                                                              660
57 ·
           actatttttt ttttgtaatt tgacgaacca aaaccagatt tatcctgaat tttaggaacc
                                                                              720
58
           acagatgtaa ctaaaccaat atttatttat tttctaaaac aaaatttcat ggcagcatgc
           ctcagcccat gaaaaaaacc ttataaaaat atctacacat tgaccattga aaagttcgtt
59
                                                                              900
60
           ctcccatggg taaccagatc aaactcacat ccaaacataa catggatatc tccttaccaa
61
           tcatactaat tattttgggt taaatattaa tcattatttt taagatatta attaagaaat
           taaaagattt tttaaaaaaa tgtataaaat tatattattc atgatttttc atacatttga 1020
62
63
           ttttgataat aaatatattt tttttaattt cttaaaaaat gttgcaagac acttattaga 1080
64
           catagtettg ttetgtttac aaaagcatte atcatttaat acattaaaaa atatttaata 1140
65
           ctaacagtag aatcttcttg tgagtggtgt gggagtaggc aacctggcat tgaaacgaga 1200
66
           qaaaqaqaqt caqaaccaqa aqacaaataa aaaqtatqca acaaacaaat caaaatcaaa 1260
           gggcaaaggc tggggttggc tcaattggtt gctacattca attttcaact cagtcaacgg 1320
67
68
           ttgagattca ctctgacttc cccaatctaa gccgcggatg caaacggttg aatctaaccc 1380
69
           acaatccaat ctcgttactt aggggctttt ccgtcattaa ctcacccctg ccacccggtt 1440
70
           tccctataaa ttggaactca atgctcccct ctaaactcgt atcgcttcag agttgagacc 1500
71
           aagacacact cgttcatata tetetetget ettetettet ettetacete teaaggtaet 1560-
72
           tttcttctcc ctctaccaaa tcctagattc cgtggttcaa tttcggatct tgcacttctg 1620
73
           gtttgctttg ccttgctttt tcctcaactg ggtccatcta ggatccatgt gaaactctac 1680
74
           tetttettta atatetgegg aataegegtt ggaettteag atetagtega aateatttea 1740
75
           taattgeett tetttetttt agettatgag aaataaaate atttitttt attteaaaat 1800
76
           aaaccttggg ccttgtgctg actgagatgg ggtttggtga ttacagaatt ttagcgaatt 1860
77
           78
           taggetteaa ttttattega gtataggtea caataggaat teaaaetttg ageaggggaa 1980
79
           ttaatccctt ccttcaaatc cagtttgttt gtatatatgt ttaaaaaatg aaacttttgc 2040
80.
           tttaaattct attataactt tttttatggc aaaaattttt gcatgtgtct ttgctctcct 2100
81
           gttgtaaatt tactgtttag gtactaactc taggcttgtt gtgcagtttt tgaagtataa 2160
82
           agatggcaga gacattecta tteacetegg agteagtgaa egagggacae eetgataage 2220
83
           totgogacca aatotoogat gotgtootog acgottgoot ogaacaggac coagacagca 2280
84
           aggttgcctg cgaaacatgc accaagacca acttggtcat ggtcttcgga gagatc
85
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     <211> LENGTH: 522
86
                                                                     RECEIVED
HAY 17 2000
TC 1600 MAIL ROOM
87
     <212> TYPE: DNA
88
     <213> ORGANISM: Glycine max
89
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90
     <221> NAME/KEY: unsure /
91
     <222> LOCATION: (405)
92
     <220> FEATURE:
93
     <221> NAME/KEY: unsure
94
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RAW SEQUENCE LISTING PATENT APPLICATION US/09/464,528A

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9.5
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       <222> LOCATION: (515)
  97
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  99
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 100
 101
             caccetgata agetetgega ecaaatetee gatgetgtee tegacgettg cetegaacag 180
 102
             gacccagaca gcaaggttgc ctgcgaaaca tgcaccaaga ccaacttggt catggtcttc 240
             ggagagatca ccaccaaggc caacgttgac tacgagaaga tcgtgcgtga cacctgcagg 300
 103
 104
             agcategget teateteaaa egatgtggga ettgatgetg acaactgeaa ggteettgta 360
105
             aacattgage agcagageee tgatattgee cagggegtge acggneacet taccaaaaga 420.
106
             cctgaagaaa ttggcgctgg tgaccaaggt cacatgtttg gctatgccac tgatgaaacc 480
 107
             ccaaaattca tgccattgag tcatgttcnt gcaancaagc tc
 108
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109
       <211> LENGTH: 32
       <212> TYPE: DNA
110
111
       <213> ORGANISM: Artificial Sequence
112
       <220> FEATURE:
       <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
113
114
       <400> SEQUENCE: 4
115
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                                                                              32
116
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117
       <211> LENGTH: 24
       <212> TYPE: DNA
118
119
       <213> ORGANISM: Artificial Sequence
120
       <220> FEATURE:
121
      <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
122
       <400> SEQUENCE: 5
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                                                                              24
123
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125
       <211> LENGTH: 1314
       <212> TYPE: DNA
126
127
       <213> ORGANISM: Glycine max
128
      <400> SEQUENCE: 6
129
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                                                                                  60
130
             ttttgggtta aatattaatc attattttta agatattaat taagaaatta aaagattttt
                                                                                 180
131
             taaaaaaatg tataaaatta tattattcat gatttttcat acatttgatt ttgataataa
132
             atatattttt tttaatttct taaaaaatgt tgcaagacac ttattagaca tägtcttgtt
133
             ctgtttacaa aagcattcat catttaatac attaaaaaat atttaatact aacagtagaa
             tettettgtg agtggtgtgg gagtaggeaa cetggeattg aaacgagaga aagagagtea
                                                                                 360
134
135
             gaaccagaag acaaataaaa agtatgcaac aaacaaatca aaatcaaagg gcaaaggctg
                                                                                 420
             gggttggctc aattggttgc tacattcaat tttcaactca gtcaacggtt gagattcact
136
137
             ctgacttccc caatctaagc cgcggatgca aacggttgaa tctaacccac aatccaatct
138
             cgttacttag gggcttttcc gtcattaact cacccctgcc acccggtttc cctataaatt
             ggaactcaat gctcccctct aaactcgtat cgcttcagag ttgagaccaa gacacactcg
139
140
             tteatatate tetetgetet tetettetet tetacetete aaggtaettt tetteteeet
             ctaccaaatc ctagattccg tggttcaatt tcggatcttg cacttctggt ttgctttgcc
                                                                                 780
141
             ttgctttttc ctcaactggg tccatctagg atccatgtga aactctactc tttctttaat
                                                                                 840
142
143
            atctgcggaa tacgcgttgg actttcagat ctagtcgaaa tcatttcata attgcctttc
                                                                                 900
                                                                                 960
144
             tttcttttag cttatgagaa ataaaatcat ttttttttat ttcaaaataa accttgggcc
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PAGE: 4 RAW SEQUENCE LISTING DATE: 04/21/2000 PATENT APPLICATION US/09/464,528A TIME: 09:15:30

Input Set: 1464528A.RAW

		input bet. Lividadi.
145		ttgtgctgac tgagatgggg tttggtgatt acagaatttt agcgaatttt gtaattgtac 1020
146	•	ttgtttgtct gtagttttgt tttgttttct tgtttctcat acattcctta ggcttcaatt 1080
147		ttattcgagt ataggtcaca ataggaattc aaactttgag caggggaatt aatcccttcc 1140
148		ttcaaatcca gtttgtttgt atatatgttt aaaaaatgaa acttttgctt taaattctat 1200
149		tataactttt tttatggcaa aaatttttgc atgtgtcttt gctctcctgt tgtaaattta 1260
150		ctgtttaggt actaactcta ggcttgttgt gcagtttttg aagtataacc atgg 1314
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152	<211>	LENGTH: 22
153	`<212>	TYPE: DNA
154	<213>	ORGANISM: Artificial Sequence
155	<220>	FEATURE:
156	<223>	OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
157	<400>	SEQUENCE: 7
158	•	ttcgagtata ggtcacaata gg 22
159	<210>	SEQ ID NO 8
160	<211>	LENGTH: 19
161	<212>	TYPE: DNA
162	<213>	ORGANISM: Artificial Sequence
163		FEATURE:
164 .	<223>	OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
165	<400>	SEQUENCE: 8
166		cttcgctgag gacatggac 19
167		SEQ ID NO 9
168	_	LENGTH: 21
169		TYPE: DNA
170		ORGANISM: Artificial Sequence
171		FEATURE:
172		OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
173	<400>	SEQUENCE: 9
174		gagttgtcgc tgttgttcga c 21
175		SEQ ID NO 10
176		LENGTH: 20
177		TYPE: DNA
178		ORGANISM: Artificial Sequence
179		FEATURE: OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
180 181		SEQUENCE: 10
182	. <400>	
183	-210>	aacacagcat ccgcattgcg 20 SEQ ID NO 11
184		LENGTH: 21
185		TYPE: DNA
186		ORGANISM: Artificial Sequence
187		FEATURE:
188		OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
189		SEQUENCE: 11
190		aggagtgcag aatcagatca g 21
191	<210>	SEQ ID NO 12
192		LENGTH: 20
193		TYPE: DNA
194	•	ORGANISM: Artificial Sequence

Please Note:

RAW SEQUENCE LISTING

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DATE: 04/21/2000 TIME: 09:15:30

Input Set: I464528A.RAW

```
195
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196
      <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
197
      <400> SEQUENCE: 12
                                                                           20
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      <213> ORGANISM: Artificial Sequence
202
203
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204
205
      <400> SEOUENCE: 13
206
                                                                           23
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208
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210
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211
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                                                                               60
           acgatatctg tttattatga tttcagggcg caaaaatgcg agtacttaat aaaattttac
213
           atttaaatta gaattttttt tatcaataaa tattaattta ttagttttat tagaaatatt
                                                                              180
214
215
           aattagaaaa ttttgaatcc ccgatttctc ctccttttct tcgctattca tcattttcta
           accaaaccaa tottatatgt tottcaaatt agaacttgaa attattaatt ataattaaac
216
           tgaaaacaat ttggtatcaa ttcatataca tgcttagtaa taaaatgcga taattaattg
217
           ataaatctgc aaaagatttt acaaatatct ttcagaaaaa attaataaca aattttgtcg
218
           ttttcatggt gttggtctga ggaggatttg gcactataga actetcctac ggaccattct
                                                                              480
219
220
           ttgcacttca actaaacgat ggtcagaatt ggtggggatt ttatattcaa gcatatccct
           ttcaaaactt cctacttact tcgtgcgttc ggtaatcggt aacattagac tttcaaaatc
                                                                              600
221
           atttttaacc cctaaacagt aaatttgaag gacaaaaata atatttttca aatttgatag
                                                                              660
222
                                                                              720
223
           actatttttt ttttgtaatt tgacgaacca aaaccagatt tatcctgaat tttaggaacc
           acagatgtaa ctaaaccaat atttatttat tttctaaaac aaaatttcat ggcagcatgc
224
225
           ctcagcccat gaaaaaaacc ttataaaaat atctacacat tgaccattga aaagttcgtt
                                                                              840
226
           ctcccatggg taaccagatc aaactcacat ccaaacataa catggatatc tccttaccaa
                                                                              900
227
           tcatactaat tattttqqqt taaatattaa tcattatttt taagatatta attaagaaat
228
           taaaagattt tttaaaaaaa tgtataaaat tatattattc atgatttttc atacatttga 1020
           ttttgataat aaatatattt tttttaattt cttaaaaaaat gttgcaagac acttattaga 1080
229
230
           catagtettg ttetgtttae aaaageatte ateatttaat acattaaaaa atatttaata 1140
231
           ctaacagtag aatcttcttg tgagtggtgt gggagtaggc aacctggcat tgaaacgaga 1200
           gaaagagagt cagaaccaga agacaaataa aaagtatgca acaaacaaat caaaatcaaa 1260
232
233
           gggcaaaggc tggggttggc tcaattggtt gctacattca attttcaact cagtcaacgg 1320
           ttgagattca ctctgacttc cccaatctaa gccgcggatg caaacggttg aatctaaccc 1380
234
235
           acaatccaat etegttaett aggggetttt cegteattaa eteaceeetg ceaceeggtt 1440
236
           tccctataaa ttggaactca atgctcccct ctaaactcgt atcgcttcag agttgagacc 1500
           aagacacact cgttcatata tetetetget ettetettet ettetacete teaaggtact 1560
237
238
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239
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240
           tetttettta atatetgegg aataegegtt ggaettteag atetagtega aateatttea 1740
241
           taattgeett tetttetttt agettatgag aaataaaate atttttttt attteaaaat 1800
           aaaccttggg ccttgtgctg actgagatgg ggtttggtga ttacagaatt ttagcgaatt 1860
242
2.4.2.
           taggetteaa ttttattega gtataggtea eaataggaat teaaaetttg ageaggggaa 1980
```

Use of n and/or Xaa have been detected in the Sequence Listing. Pleas review the Sequence Listing to nsure that a c rresponding xplanation is presented in the <220> to <223> fields of each sequence which presents at least ne n or Xaa.



6

VERIFICATION SUMMARY PATENT APPLICATION US/09/464,528A

DATE: 04/21/2000 TIME: 09:15:30

Input Set: I464528A.RAW

Line ? Error/Warning Original Text

105 W "N" or "Xaa" used: Feature required accattgage ageagageee tgatattgee cagggegt
107 W "N" or "Xaa" used: Feature required accaegnace ecggaaggtt geegeagegt gtggattg
483 W "N" or "Xaa" used: Feature required agaccaegna egeeggaaggt tgeegeage gtgtggat
552 W "N" or "Xaa" used: Feature required gaccaegnae geeggaaggt tgeegeageg tgtggatt
625 W "N" or "Xaa" used: Feature required agatcaaca ettacgtttg caaegteeaa gagcaaat